



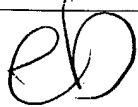
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,746	02/27/2002	Michael Zobel	Mo6985/LeA	3524
157	7590	04/14/2004	EXAMINER	
BAYER POLYMERS LLC 100 BAYER ROAD PITTSBURGH, PA 15205			YOON, TAE H	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/069,746	Applicant(s) ZOBEL ET AL. 	
	Examiner Tae H Yoon	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 Feb. 2002, Pre. Amdt.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 23-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24-41 are rejected since the recited "substituted" in claims 24 and 29 is non-enabling until the named functional groups or substituents found in the specification are recited in claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 29, 30 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "derivatives" in claim 29 is indefinite absent functional groups. EP(D)M of claim 30 is indefinite and a full chemical name is needed. Improper Markush language is recited in claim 36 and a substitution of "among" with "the group consisting of" is suggested.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 197 34 661 in view of Paulik (US 5,844,028).

DE teaches a flame retardant polycarbonate composition containing a graft copolymer, a tetrafluoroethylene polymer, the instant inorganic powders such as aluminum oxide-hydroxid having an average particle size of 50 nm and a phosphorous compound in claims and example 4. DE also teaches employing additional additives and thin molded articles.

The instant invention further recites a phosphonate amine as a flame retardant over DE. However, the instant phosphonate amine is well known flame retardant as taught by Paulik, cols. 1-3. Paulik teaches the use of said phosphonate amine with polymers such as polycarbonates at col. 1, line 29.

It would have been obvious to one skilled in the art at the time of invention to utilize said phosphonate amine of Paulik in DE since DE teaches the use of a phosphorous compound and since Paulik teaches the use of said phosphonate amine in polycarbonates as a flame retardant.

Claims 23-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gosens et al (US 5,204,394) in view of DE 197 34 661 and Paulik (US 5,844,028).

Gosens et al teach flame retardant compositions comprising a polycarbonate, a styrene-containing graft copolymer (such as ABS), a tetrafluoroethylene polymer and a flame retardant in abstract and examples. See table on the top of col. 6 for components. Gosens et al teach employing additional additives such as fillers at col. 5,

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lines 46-57, and molded articles of flame retardant polycarbonate composition is well known in the art.

The instant invention further recites instant inorganic powders having an average particle size less than 200 nm, phosphonate amine and the composition of graft copolymer over Gosens et al. However, the instant phosphonate amine is well known flame retardant as taught by Paulik, cols. 1-3. Paulik teaches the use of said phosphonate amine with polymers such as polycarbonates at col. 1, line 29. DE teaches the instant inorganic powders and graft copolymer.

It would have been obvious to one skilled in the art at the time of invention to utilize said phosphonate amine of Paulik and inorganic powders (and ABS graft copolymer) of DE in Gosens et al since Gosens et al teach the use of a phosphorous compound and employing fillers and since Paulik teaches the use of said phosphonate amine in polycarbonates as a flame retardant and since DE teaches the use of said inorganic powders and ABS graft copolymer with polycarbonates.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tae H Yoon  
Primary Examiner  
Art Unit 1714

THY/April 5, 2004